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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/845,489	04/30/2001	David Bach	20816/2	2352

7590 09/19/2005  
Clifford H. Kraft  
320 Robin Hill Drive  
Naperville, IL 60540

EXAMINER

CHEU, CHANGHWA J

ART UNIT	PAPER NUMBER
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1641

DATE MAILED: 09/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b> 09/845,489	<b>Applicant(s)</b> BACH ET AL.	
	<b>Examiner</b> Jacob Cheu	<b>Art Unit</b> 1641	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 July 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 90-94 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 90-94 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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### DETAILED ACTION

Applicant's amendment filed on 7/21/2005 has been received and entered into record and considered.

The following information provided in the amendment affects the instant application:

1. Claims 1-89 and 95-101 are cancelled.
2. Claims 90-94 are under examination.

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 90-94 are rejected under 35 U.S.C. 102 (e) as being anticipated by Pfoet et al. (US 6485690) as evidenced by Murray et al. (US 4752115).

Pfoet et al. teach a biosensor for high throughput chemical synthesis and biological assay and/or processing. Pfoet et al. that the biosensor comprises -

a top outer layer containing at least one fluid port (see Figure 4 and 5);  
a fluidics layer below said top outer layer containing at least one fluidics channel in fluid communication with said port (see Figure 6-10).

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Pfost et al. also teach that “any of the layers in the processor can incorporate electronic or optical elements including, for example, transistors, memory cells, capacitors, resistors, LED's, fiber optics” (Col. 11, line 40-45)(emphasis added).

Although Pfost et al. do not explicitly teach the details of the fiber optic structure, it is well known that the fiber optics are composed of two cladding layers and waveguide core as evidenced Murray et al. wherein Murray et al. teach that said fiber optic waveguide having a core surrounding by a cladding and a portion of said cladding being removed from said waveguide (See claims 12-13; Col. 2, line 25-35; Col. 3, line 21-30).

Pfost et al. also teach each layer can incorporating illuminating exiting source coupled with waveguide (Col. 11, line 47-50).

Pfost et al. teach using fluorescent tags placing in said fluid port when transferred by the fluid channel into reaction well (micro-cuvette) for detection from appropriate light source illuminating (Col. 1, line 35-45).

With respect to claims 91-92, Pfost et al. teach using plurality of micro-cuvettes (reaction wells)(see Figure 9, Col. 11, line 40-45) as evidenced by Murray et al. (see claim 12-13; Col. 2, line 25-35; Col. 3, line 21-30).

With respect to claim 93, the device taught by Pfost contains a bottom supporting layer below the cladding layer (See Figure 4 and Figure 5).

With respect to claim 94, the bottom supporting layer is also optically transparent to light illumination (See Figure 9; Col. 11, line 40-45).

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***Response to Applicant's Arguments***

***Withdraw Allowable Subject Matter***

3. The allowable subject matter set forth in the previous Office Action (4/19/2005) is withdrawn due to the new art and new rejection.

***Conclusion***

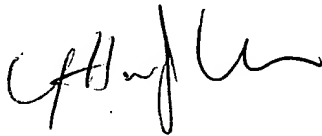
4. No claim is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacob Cheu whose telephone number is 571-272-0814. The examiner can normally be reached on 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long Le can be reached on 571-272-0823. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jacob Cheu  
Examiner  
Art Unit 1641



September 12, 2005



LONG V. LE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1600

09/14/05